## ezBIDS

Cloud-based graphical user interface for automated DICOM to BIDS data ingestion

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#### The BIDS standard: What is it and what does it do

#### dicomdir/

1208200617178\_22/ 1208200617178 22 8973.dcm 1208200617178 22 8943.dcm 1208200617178\_22\_2973.dcm 1208200617178\_22\_8923.dcm 1208200617178\_22\_4473.dcm 1208200617178\_22\_8783.dcm 1208200617178\_22\_7328.dcm 1208200617178\_22\_9264.dcm 1208200617178\_22\_9967.dcm 1208200617178\_22\_3894.dcm 1208200617178\_22\_3899.dcm 1208200617178\_23/

1208200617178\_24/ 1208200617178\_25/ |my\_dataset/ participants.tsv |sub-01/ |anat/ sub-01\_T1w.nii.gz lfunc/ sub-01\_task-rest\_bold.nii.gz sub-01\_task-rest\_bold.json ldwi/ 🖻 sub-01\_dwi.nii.gz sub-01\_dwi.json sub-01\_dwi.bval sub-01\_dwi.bvec lsub-02/ lsub-03/ lsub-04/

Gorgolewski et al., Scientific Data 2016

#### The awesomeness of BIDS!

- Primary benefits of BIDS: data sharing and reproducibility
- Dozens of BIDS converters have been developed that take raw DICOMS from scanners and convert them to BIDS







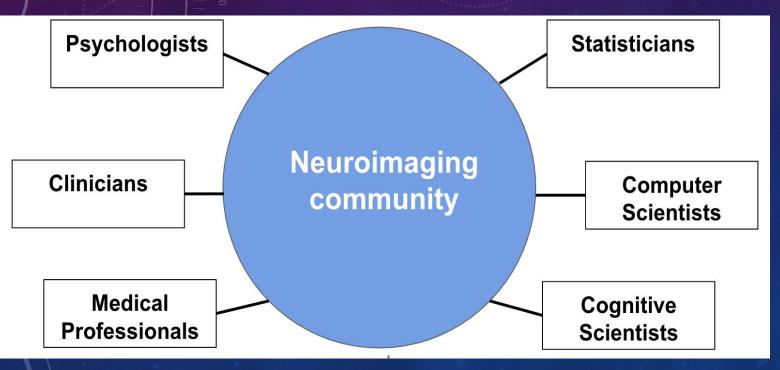
### **Barrier of Entry to BIDS & Data Sharing**

#### Not everyone likes green

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### **Barrier of Entry to BIDS & Data Sharing**

BIDS conversion requires coding familiarity
 Not ubiquitous in the community



## ezBIDS a graphical web interface for automated data capture and BIDSification

- We present ezBIDS, a tool for scanner to BIDS data ingestion
- ezBIDS uses a graphical interface to automatically capture DICOM files and transform them into BIDS
- ezBIDS works with the user to improve the result of the automated process and reduce errors

111	ezBIDS	Patient / Subject Mappings	
0 2	Upload	Decide how you want to map DICOM Pa can download the mapping table later.	tientID to BIDS Subject ID. You
	Description / README		Reset Mapping $~~$
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	Sessions	PatientName PatientBirthDate 19810609	

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	Authors	Soichi Hayashi 🛞 Dan Levitas 🛞			~	
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ezBIDS	Patient / Subject Mappings				
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ezBIDS	Participants Info			
Upload	You can optionally store metadata/phenotypi	ical data for each subject/participar	nts on this datasets within you	ır BIDS dataset.
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ezBIDS	All done!		Re-Finalize
Upload	Download BIDS Upload Data to brainlife.io Upload Data to OpenNeuro		
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Sessions	*ezBIDS philosophy is to w		
Series	user to improve the result	of the	
	automated process		
Participants			
BIDS Structure			
Finalize			

# ezBIDS is part of the brainlife.io project and will soon be available on the platform

#### brainlife

Signup

➔ Home

#### Avesani et al., Scientific Data 2019

PESTILLI 🍧 LAB

Screenshot



Detail Dataset	B Processes Pipelines	Publications	
941 Subjects 100	71 Datasets		
SUBJECT	DATATYPE	DESCRIPTION	CREATE
A00008326	Treasurfac	output from Freesarter	9/10917.1
	Revolution (rest	session DD2 task rest acq CAP	11/23/2014
	Taractions, read	session:202 task/rest acq 645	11222018
	Realizable land	session D52 beak rest ang 1400	11222016
	Erstank CHECKERBOARD	session 202 task CHECKERBOARD	1522/2016.
	SPOTHER CHECKDREGARD	session D52 task CHECKERBOARD	1122/2016
	Constitute	092	15232014
		082	1122/2016
	Sectors BREATHHOLD	session:092 task:0REATHHOLD acc	1122/2014
A00008389	Resolution (rest)	session 252 task/wst acq/CAP	11222016
	function real	session (262 task yes) acq 1400	11222014
	Lauter CHECKERBOARD	session 252 task CHECKERBOARD	11220018
	SULTRIK CHECKERBOARD	session DE2 task CHECKERBOARD	11222014
	analtine .	052	11/22/2018
	Rectaint BREATHHOLD	session DS2 task BREATHHOLD acc	1922/2016
A00010883	Terester	output from Preesurier	9/10917, 1
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	fancture rest	session:052 task rest acq 645	11/22/2014
	functions rest	session:DS2 task/rest acq 1400	1123/2014.
	Enclass CHECKERBOARD	MINING DIS2 1884-CHECKERBOARD	1522/2016.
	LINCOM CHECKERBOARD	session DB2 task CHECKERBOARD	1122/2016

Free cloud platform for secure neuroscience data analysis.

SAPP can run on the follow		is.
gpu1-pestillilab Cloud Providers	4	iu-carbonate (sha HPC Systems
🖢 sco	DRE 12	
s-slurm2 (shared) Cloud Providers	125	iu-karst (shared) IU / Karst (deprecated
SCO	DRE 10	BUSY
<b>z-slurm1 (shared)</b> Cloud Providers	-	bridges (psc) HPC Systems
500	DRE 10	RUSY

We plan to make ezBIDS interoperable with other systems such as



## Thank you!







Franco Pestilli



Microsoft





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Dan Levitas